

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

WHAT IS CLAIMED:

Claim 1 (Currently amended) A An isolated motilin receptor; protein substantially free from receptor-associated proteins comprising the amino acid sequence set forth in SEQ ID NO: 3.

Claim 2 (Currently amended) A An isolated motilin receptor; protein according to Claim 1 which is human comprising the amino acid sequence set forth in SEQ ID NO: 5.

Claim 3 (Currently amended) A An isolated motilin receptor protein comprising the amino acid sequence encoded by the coding region set forth in SEQ ID NO: 1 according to Claim 2 which is MTL-R1A having the amino acid sequence SEQ.ID.NO.:3.

Claim 4 (Currently amended) A An isolated motilin receptor protein comprising the amino acid sequence encoded by the nucleotide sequence set forth in according to Claim 3 having the nucleic acid sequence SEQ.ID.NO.:2 SEQ ID NO:2 or SEQ ID NO: 4.

Claim 5 (Canceled)

Claim 6 (Canceled)

Claim 7 (Withdrawn) A motilin receptor according to Claim 6 which is 75E7 having the amino acid sequence SEQ.ID.NO.:7.

Claim 8 (Currently amended) A method for determining whether a ligand is capable of binding to a human motilin receptor comprising:

- (a) transfecting test cells with an expression vector encoding a motilin receptor protein comprising the amino acid sequence set forth in SEQ ID NO:3 or SEQ ID NO: 5;
- (b) exposing the test cells to the ligand;

- (c) measuring the amount of binding of the ligand to the motilin receptor;
- (d) comparing the amount of binding of the ligand to the motilin receptor in the test cells with the amount of binding of the ligand to control cells that have not been transfected with the motilin receptor where if the amount of binding of the ligand to the test cells is greater than the amount of binding of the ligand to the control cells, then the substance is capable of binding to motilin receptor.

Claim 9 (new) The method of Claim 8 wherein the expression vector comprises the nucleic acid sequence of SEQ ID NO:2 or SEQ ID NO: 4.

Claim 10 (new) An isolated nucleic acid comprising a nucleotide sequence encoding a human motilin receptor, wherein the sequence is selected from the group consisting of:

- (a) a nucleic acid sequence consisting of the nucleic acid sequence of SEQ ID NO:2;
- (b) a nucleic acid sequence consisting of the nucleic acid sequence of SEQ ID NO: 4;
- (c) a cDNA sequence encoding a motilin receptor isolated from a human thyroid library; and
- (d) a cDNA sequence encoding a motilin receptor isolated from a host cell transfected with the nucleic acid of SEQ ID NO: 1.

Claim 11 (new) An isolated nucleic acid molecule encoding a protein according to claim 3, wherein the nucleic acid consists of a cDNA sequence isolated from a human thyroid DNA library.

Claim 12 (new) A cDNA encoding a human motilin receptor wherein the cDNA consists of a nucleic acid isolated from a host cell transfected with an expression vector comprising SEQ ID NO:1.

Claim 13 (new) An expression vector comprising a nucleic acid according to Claim 10.

Claim 14 (new) An expression vector comprising a nucleic acid selected from the group consisting of:

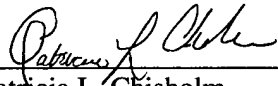
- (a) SEQ ID NO:1;
- (b) SEQ ID NO:2;
- (c) SEQ ID NO: 4;
- (d) a cDNA sequence encoding a motilin receptor isolated from a human thyroid library; and
- (e) a cDNA sequence encoding a motilin receptor isolated from a host cell transfected with the nucleic acid of SEQ ID NO: 1.

Claim 15 (new) A host cell transfected with a vector according to claim 14.

Claim 16 (new) A host cell expressing a human motilin receptor, wherein said motilin receptor consists of an amino acid sequence selected from the group consisting of SEQ ID NO: 3 and SEQ ID NO: 5.

Applicants respectfully request entry of the corrected "Amendments to the Claims," section in its entirety into the above referenced RCE application.

Respectfully submitted,

By 

Patricia L. Chisholm
Reg. No. 45,822
Attorney for Applicant

Date: 2/2/2005

MERCK & CO., INC.
P.O. Box 2000
Rahway, New Jersey 07065-0907
(732) 594-5738